

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S130	1	"2002040894"	JPO	OR	ON	2007/10/17 12:10
S127	0	"20020040894"	JPO	OR	ON	2007/10/17 12:10
S129	2	"20020040894"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/17 13:07
S131	11658	(laser electron energy beam) with (plural\$4 multiple several another) adj2 (hole aperture opening window)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/17 13:10
S132	7009	(laser electron energy beam) with (plural\$4 multiple several another) adj (hole aperture opening)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/17 13:11
S133	5317	(laser beam) with (plural\$4 multiple several) adj (hole aperture opening)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/17 13:12
S138	2	S135 and aperture	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/17 13:24
S137	0	S135 and plural\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/17 13:24
S136	0	S135 and plural\$4 with aperture	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/17 13:24
S135	2	"20050189331"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/17 13:24

## EAST Search History

S13 9	52	(laser adj beam) near3 (plural\$4 multiple several) adj (hole aperture opening)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/17 13:34
S13 4	1247	(laser beam) near3 (plural\$4 multiple several) adj (hole aperture opening)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/17 13:34
S14 2	0	(laser adj2 beam) same beam near3 (plural\$4 multiple several) adj (hole aperture opening) same window	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/17 13:41
S14 1	4	(laser adj2 beam) same beam near3 (plural\$4 multiple several) adj (hole aperture opening) same nozzle	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/17 13:41
S14 0	70	(laser adj2 beam) same beam near3 (plural\$4 multiple several) adj (hole aperture opening)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/17 13:42
S14 5	112	(laser beam) and (plural\$4 multiple) with (hole aperture opening) and nozzle	JPO	OR	ON	2007/10/17 13:43
S14 4	119	(laser beam) and (plural\$4 multiple several) with (hole aperture opening) and nozzle	JPO	OR	ON	2007/10/17 13:43
S14 3	4007	(laser beam) and (plural\$4 multiple several) with (hole aperture opening)	JPO	OR	ON	2007/10/17 13:43
S14 6	76	(laser beam) and (plural\$4 multiple) near5 (hole aperture opening) and nozzle	JPO	OR	ON	2007/10/17 13:44
S14 8	33	(laser beam) and (plural\$4 multiple) near5 (hole aperture opening) and nozzle and (pass\$4 through\$7)	JPO	OR	ON	2007/10/17 13:48
S14 7	7	(laser beam) and (plural\$4 multiple) near5 (hole aperture opening) and nozzle and (reduc\$6 debris deposit\$5)	JPO	OR	ON	2007/10/17 13:48
S15 0	490	top with nozzle with (plural\$4 multiple array\$4)	JPO	OR	ON	2007/10/17 13:54

## EAST Search History

S14 9	28	(laser beam) and (plural\$4 multiple) near5 (hole aperture opening) and nozzle and (pass\$4 through\$7) with (hole aperture opening)	JPO	OR	ON	2007/10/17 13:54
S15 1	3	top with nozzle with (plural\$4 multiple array\$4) and laser	JPO	OR	ON	2007/10/17 13:55
S15 2	17	window with (plural\$4 multiple array\$4) near4 (open\$3 aperture hole) and laser	JPO	OR	ON	2007/10/17 13:59
S15 3	31	nozzle with (plural\$4 multiple array\$4) near4 (open\$3 aperture hole) and laser	JPO	OR	ON	2007/10/17 14:01
S15 5	335	spray\$4 with nozzle and (plural\$4 multiple array\$4) near4 (open\$3 aperture hole)	JPO	OR	ON	2007/10/17 14:02
S15 4	0	spray\$4 with nozzle and (plural\$4 multiple array\$4) near4 (open\$3 aperture hole) and (single first) with subsequent\$4	JPO	OR	ON	2007/10/17 14:02
S15 6	41	spray\$4 with nozzle and (plural\$4 multiple array\$4) with (open\$3 aperture hole) and (subsequent\$4 sequen\$5 switch\$4 next another differ\$5) with (open\$3 aperture hole)	JPO	OR	ON	2007/10/17 14:03
S1	317	laser with nozzle with window	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 11:28
S16 0	614052	S158 S159	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 11:30
S15 9	118164	"156"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 11:30
S15 8	505570	"219"/\$.ccls. "438"/\$.ccls. "29"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 11:30

## EAST Search History

S16 3	4	S161 and window and nozzle	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 11:32
S16 2	12	S161 and window	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 11:32
S16 1	12	S160 and laser with plural\$4 adj window	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 11:34
S16 4	31	S160 and sequen\$4 with plural\$4 with window	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 11:36
S16 5	31	S164 and plural\$4 with window	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 11:38
S16 6	106	laser with surg\$6 and plural\$4 with window	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 11:39
S16 8	0	laser with surg\$6 and (laser beam) with plural\$4 with window and window with debris	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 11:42
S16 7	29	laser with surg\$6 and (laser beam) with plural\$4 with window	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 11:42
S17 4	1	S171 and window	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 12:25
S17 3	0	S171 and debris	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 12:25

## EAST Search History

S17 2	0	S171 and window with debris	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 12:25
S17 1	1	("6902278").PN.	USPAT; USOCR	OR	OFF	2007/10/19 12:25
S16 9	37	laser with surg\$6 and (laser beam) with window and window with debris	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 12:28
S17 5	129	laser with surg\$6 and (laser beam) with window and window near4 (opening aperture hole)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 12:29
S15 7	71	laser with plural\$4 adj window	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:08
S17 6	41	laser with plural\$4 adj (window slot slit opening aperture) and (window slot slit opening aperture) with (dirt\$4 debris soil\$3 cloud\$4 clog\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:22
S17 8	87	laser with (window slot slit opening aperture) with larger near (diameter beam) adj2 (window slot slit opening aperture)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:24
S17 7	312	laser with (window slot slit opening aperture) with larger near (diameter beam)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:24
S17 9	10	laser with beam near2 (window slot slit opening aperture) with larger near (diameter beam) adj2 (window slot slit opening aperture)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:26
S18 0	11	laser with beam with (window mask\$3) with (slot slit opening aperture) with larger near (diameter beam) adj2 (slot slit opening aperture)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:30

## EAST Search History

S18 1	1	laser with beam with (window mask\$3) with (slot slit opening aperture) with smaller near (diameter beam) adj2 (slot slit opening aperture)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:33
S18 2	2	laser with beam with (window mask\$3) with (slot slit opening aperture) with flush\$4 near2 gas	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:35
S18 7	135	laser with beam and nozzle with gas with draw\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:36
S18 6	0	laser with beam and nozzle with flush\$4 near2 gas with draw\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:36
S18 5	0	laser with beam same nozzle with flush\$4 near2 gas with draw\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:36
S18 4	0	laser with beam same nozzle with (slot slit opening aperture) with flush\$4 near2 gas with draw\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:36
S18 3	0	laser with beam with nozzle with (slot slit opening aperture) with flush\$4 near2 gas with draw\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:36
S18 8	1	laser with beam with nozzle with (slot slit opening aperture) with gas with draw\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:37
S18 9	15	laser with beam with nozzle with (slot slit opening aperture) with gas near (draw\$3 purg\$4 eject\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:39
S19 1	90	laser with beam with nozzle and (slot slit opening aperture hole) near2 (threaded cork screw\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:40

## EAST Search History

S19 0	166	laser with beam with nozzle and (slot slit opening aperture hole) with (threaded cork screw\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:40
S19 2	10	laser with beam with nozzle same (slot slit opening aperture hole) near2 (threaded cork screw\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:42
S19 3	3	laser with beam with nozzle same (slot slit opening aperture hole) with (swirl\$4 rotat\$4) near gas	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:43
S19 5	0	laser with beam same thread\$3 near nozzle same (swirl\$4 rotat\$4) near3 (gas fluid medium)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:44
S19 4	0	laser with beam same thread\$3 near nozzle same (swirl\$4 rotat\$4) near3 gas	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:44
S19 6	0	laser with beam and thread\$3 near nozzle same (swirl\$4 rotat\$4) near3 (gas fluid medium)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:45
S19 8	221	laser with beam and nozzle with (circulat\$4 swirl\$4 rotat\$4) near3 (gas fluid medium)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:46
S19 7	0	laser with beam and circulat\$4 near3 nozzle same (swirl\$4 rotat\$4) near3 (gas fluid medium)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:46
S19 9	106	laser with beam and nozzle with (circulat\$4 swirl\$4 rotat\$4) near (gas fluid medium)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:47
S20 3	0	S201 and diode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:54

## EAST Search History

S20 2	0	S201 and (organic light emitting) with diode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:54
S20 1	2	"20050189331"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:54
S55	1	"20050189331" and cover\$4 with aperture with transparent\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:54
S20 5	1	S201 and organic with (light emit\$4 diode)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:55
S20 4	1	S201 and organic	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:55
S20 6	13	laser with beam with nozzle and oled	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 13:59
S20 9	107	laser with beam with nozzle and ultraviolet with laser and ablation	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 14:10
S20 8	342	laser with beam with nozzle and ultraviolet with laser	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 14:10
S20 7	22	laser with beam with nozzle and (form\$3 produc\$4 manufactur\$5) near2 (oled lcd)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 14:10
S21 0	19	laser with beam with nozzle and ultraviolet with laser and ablation with gas	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 14:13



## EAST Search History

S21 2	13	laser with beam with nozzle and ultraviolet with laser and (oled lcd)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/19 14:21
L3	23	laser and beam and diameter with smaller and mask	JPO	OR	ON	2007/10/21 09:39
L2	52	beam and diameter with smaller and mask	JPO	OR	ON	2007/10/21 09:39
L1	66	beam and diameter and smaller and mask	JPO	OR	ON	2007/10/21 09:39
L4	11	laser and beam and diameter with smaller with (aperture opening hole) and mask	JPO	OR	ON	2007/10/21 09:40
L6	125	laser and beam and diameter with smaller with (aperture opening hole)	JPO	OR	ON	2007/10/21 09:41
L5	3	laser and beam and diameter with smaller with (aperture opening hole) with mask	JPO	OR	ON	2007/10/21 09:41
L7	280	(laser beam) with diameter with smaller with (aperture opening hole)	JPO	OR	ON	2007/10/21 09:42
L9	11	(laser beam) with diameter with smaller with (aperture opening hole) and (ablat\$4 cut\$4 drill\$4 machining) and (mask\$3 pattern\$4 stencil)	JPO	OR	ON	2007/10/21 09:47
L11	28	8 not 9	JPO	OR	ON	2007/10/21 09:48
L10	2	(laser beam) with diameter with smaller with (aperture opening hole) and (ablat\$4 cut\$4 drill\$4 machining) and eye\$4	JPO	OR	ON	2007/10/21 09:48
L8	39	(laser beam) with diameter with smaller with (aperture opening hole) and (ablat\$4 cut\$4 drill\$4 machining)	JPO	OR	ON	2007/10/21 09:48
L13	21	12 not 9	JPO	OR	ON	2007/10/21 09:49
L12	29	laser and (laser beam) with diameter with smaller with (aperture opening hole) and (ablat\$4 cut\$4 drill\$4 machining)	JPO	OR	ON	2007/10/21 09:49
S20 0	8	laser with beam and nozzle with (produc\$3 caus\$3 forc\$3) with (circulat\$4 swirl\$4 rotat\$4) near (gas fluid medium)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/21 10:59

## EAST Search History

L14	8	laser with beam and nozzle with (produc\$3 caus\$3 forc\$3) with (circulat\$4 swirl\$4 rotat\$4) near (gas fluid medium)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/21 11:00
L17	1	16 and groov\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/21 11:01
L16	1	("6288363").PN.	USPAT; USOCR	OR	OFF	2007/10/21 11:01
L15	3	L14 and circulat\$5 with gas with flow and groov\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/21 11:01
S21 1	0	laser with beam with nozzle and ultraviolet with laser and ablation with (oled lcd)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/21 11:10
L19	36	laser with ablat\$4 with oled	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/21 11:11
L18	0	laser with beam with nozzle and ultraviolet with laser and ablation with oled	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/21 11:11
L20	2	laser with ablat\$4 with oled and laser with nozzle	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/21 11:12
L22	17	laser with ablat\$4 with oled and activ\$4 with organic\$5	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/21 11:13
L21	1	laser with ablat\$4 with oled and activ\$4 with organic\$5 with optic\$9	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/21 11:13